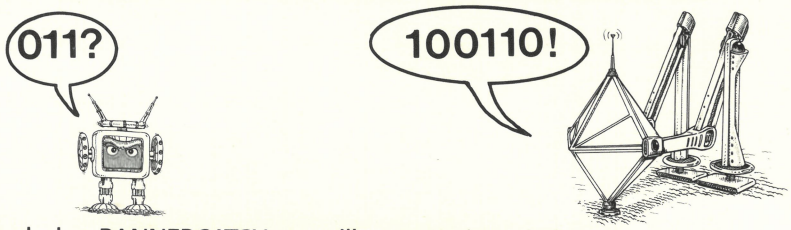
FOR ROBOTS ONLY—A MESSAGE FROM MAX



Robots, during BANNERCATCH we will communicate in binary code—a number system that uses only two digits, one and zero. Use the binary decoder boxes and instructions that follow to change the binary numbers back into decimal (human) numbers.

32	16	8	4	2	1

To change the ones and zeros in a binary number into a decimal number, plug the binary digits into your decoder, starting from the right. For example, the binary number 101101 equals the decimal number 45, as shown below.

1	0	1	1	0	1
↓	↓	↓	↓	↓	↓
32	16	8	4	2	1

32+0+8+4+0+1=45

As you can see, the binary number 101101 has 1 thirty-two, 0 sixteens, 1 eight, 1 four, 0 twos, and 1 one. Adding these numbers (32+0+8+4+0+1) gives you the result—the decimal number 45.

You may also use the binary decoder to change decimal numbers into binary numbers. For example, the decimal number 5 requires 1 four, 0 twos, and 1 one. Therefore, decimal 5=binary 101. Whenever you change a decimal number into a binary number, start as far left in the decoder as possible.

			1	0	1=5
			↑	↑	↑
32	16	8	4	2	1

Here's how you use binary code to talk to me. First, type in your robot identification number: 00, 01, 10, or 11. Next, use binary code to ask me one of the following seven questions. For example, to ask Question 3, type the binary number 11.

QUESTION 0=Where am I?
QUESTION 1=Where should I go?
QUESTION 2=Where is the humanoids' flag?
QUESTION 3=Where is our flag?
QUESTION 4=Where is the jail to which the humanoids are sent?
QUESTION 5=Where is the jail to which robots are sent?
QUESTION 6=What is my goal?

I will answer Questions 0–5 using a sector number written in binary code. For example, if our flag was in sector 45, I would respond with 101101.

I will answer Question 6 with binary numbers that correspond with the following jobs:

Job 0=Patrol and defend our flag
Job 1=Attack the humanoids' flag
Job 2=Chase the humanoid with the flag
Job 3=Release robots from jail
Job 4=Block for robot carrying the flag
Job 5=Stay in jail
Job 6=Return home with humanoids' flag

For example, if you ask me Question 6, and I answer binary number 00100 (decimal number 4), your job would be to block for the robot carrying the flag.

Learning binary code is like learning any foreign code. The more you use it, the easier it becomes.

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